Amendment Under 37 C.F.R. § 1.111 U.S. Appln. No. 09/676,095

Attorney Docket No.: Q56074

REMARKS

Summary of the Office Action

The specification is objected to, because of the use of the term "Garbor," which the Examiner believes should be changed to "Gabor."

Claims 1-42 are pending in the application.

Claims 4-7 and 11-42 are allowed. Claim 9 is objected to, but would be allowable, if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5, 7, 9, 15, 17, 19, 21, 23, 31, 33, and 40 are objected to, because of the presence of the term "Garbor" in these claims. The Examiner believes that "Garbor" should be replaced by "Gabor." Applicant notes, however, that claim 9 does not include the term "Garbor."

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by the article "A Performance Evaluation of Texture Measures for Image Classification and Segmentation Using the Cascade-Correlation Architecture" by Augusteijn et al. (hereafter "Augusteijn").

Claims 1-3 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by the article "Myocardial Tissue Characterization by Means of Nuclear Magnetic Resonance Imaging" by Ravizza et al. (hereafter "Ravizza").

Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Augusteijn.

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the article "Non-parametric Similarity Measures for Unsupervised Texture Segmentation and Image Retrieval" by Puzicha et al. (hereafter "Puzicha") in view of Ravizza.

Also, claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the article "Texture Features for Browsing and Retrieval of Image Data" by Manjunath et al. (hereafter "Manjunath").

Analysis of Objections and Claim Rejections

Applicant amends the specification and claims, as suggested by the Examiner to change "Garbor" to "Gabor." Also, FIGS. 1, 3, 5, 6 and 7 are amended in the same way.

Augusteijn relates to comparisons between several texture-based measures with respect to their ability to classify and segment images.

Ravizza relates to identifying objective descriptors of tissue textures by means of a computerized analysis of gray level geometric properties.

Puzicha relates to defining similarity measure for textures based on statistical tests to compare the empirical distributions of Gabor coefficients.

Manjunath relates to using texture information for browsing and retrieval of large image data, using Gabor wavelet features for texture analysis.

For the rejection of claim 10 over the combination of Puzicha and Ravizza, Applicant submits that there is no suggestion or motivation to combine the references. The Examiner concedes that Puzicha does not disclose that the texture descriptor has a mean and a variance of the pixel values of an original image as texture features, but contends that it is well known as evidenced by Ravizza. The Examiner asserts that it would have been obvious to employ Ravizza's technique in Puzicha's method, "because it is accurate in identifying textures" and "due to its inherent simple computation." Office Action, page 5, last paragraph. However, there is no explanation of why one of ordinary skill in the art would have been motivated to modify the specific teachings of Puzicha by the specific teachings of Ravizza. Instead, the

Amendment Under 37 C.F.R. § 1.111 U.S. Appln. No. 09/676,095

Attorney Docket No.: Q56074

Examiner's asserted motivation to combine the references is merely a generalized statement about alleged qualities of Ravizza's technique, without any relation to the teachings of Puzicha. Furthermore, Ravizza is directed to algorithms for texture recognition on digital imaging from nuclear magnetic resonance equipment. See page 504, section 4.1. There is no teaching or suggestion that the algorithms employed by Ravizza would be applicable to the image retrieval methods disclosed by Puzicha. Therefore, Applicant submits that claim 10 is allowable over the prior art, for at least this reason.

With regard to the rejection of claim 10 over the combination of Manjunath and Ravizza, Applicant submits that claim 10 is allowable for reasons analogous to those described above for the combination of Puzicha and Ravizza, since the Examiner has applied the same generalized rationale for combining Manjunath and Ravizza as for combining Puzicha and Ravizza.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111 U.S. Appln. No. 09/676,095

Attorney Docket No.: Q56074

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 38,551

SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

washington office 23373
CUSTOMER NUMBER

Date: January 26, 2004